**.**

**1. Factor completely.**25x2 + 80x + 64

A) Prime
B) (5x + 8)2
C) (5x + 8)(5x - 8)
D) (5x - 8)2

**2.**

**Factor completely.**15z2 + 14z - 8

A) (15z + 4)(z - 2)
B) (3z - 4)(5z + 2)
C) Prime
D) (3z + 4)(5z - 2)

**3.**

**Write the expression in lowest terms.**

A) 
B) 
C) 
D) 

**4.**

**Solve by the square-root property.**(x + 9)2 - 3 = 0

A) 9 ± 
B) -6, 12
C) -3 ± 
D) -9 ± 

**5.**

**Factor completely.**x2 + 50x + 625

A) (x - 25)2
B) Prime
C) (x + 25)(x - 25)
D) (x + 25)2

**6.** **Evaluate the expression. Write answer without exponents.**-100

A) 0
B) -10
C) 1
D) -1

**7.**

**Perform the indicated operations. Give the answer in lowest terms.**- 

A) 
B) 
C) 
D) 

**8.**

**Solve the equation.**+ 3 = 8

A) -25
B) -27
C) 25
D) 27

**9.**

**Factor completely.**x2 - 12xy + 36y2

A) (x - 6y)2
B) (x- 6y)(x + 6y)
C) Prime
D) (x + 6y)2

**10.**

**Fill in the blank with either =, <, or > to make the statement true.**∙ \_\_\_\_\_\_ 

A) =
B) >
C) <

**11.**

**Evaluate the expression using order of operations.**2 ∙ 52

A) 100
B) 250
C) 10
D) 50

**12.**

**Perform the indicated operations. Give the answer in lowest terms.**+ - 

A) 
B) 
C) 
D) 

**13.**

**Perform the indicated operation. Give the answer in lowest terms.**÷ 

A) 
B) 
C) 
D) 

**14.**

**Simplify. Leave answer with exponent.**(5y)4 ∙ (5y)7

A) 25y11
B) 25y28
C) 5y28
D) (5y)11

**15.**

**Use a calculator to evaluate the expression.**11

A) 12.8333
B) 5.4502
C) 9.4286
D) 0.1835

**16.**

**Find expressions for the Revenue, Cost, and Profit from selling x thousand items.**Item PriceFixed CostVariable Cost
$7.00 $195,503 -3x2 + 3480x - 100

A) R = 7000x; C = -3x2 + 3480x + 195,403; P = 3x2 - 2780x - 195,403
B) R = 7000x; C = -3x2 + 3480x + 195,503; P = 3x2 - 2780x - 195,403
C) R = 7000x; C = 3x2 + 3480x + 195,403; P = -3x2 - 2780x - 195,403
D) R = 7000x; C = -3x2 + 3480x + 195,403; P = 3x2 - 2780x - 195,503

**17.**

**Write the rational exponent expression as an equivalent radical expression.**(-3x)-1/3

A) 3 
B) 
C) 
D) 

**18.**

**Factor out the greatest common factor.**4(x + 5)2 + 3(x + 5)4

A) (x + 5)2(3x2 + 30x + 79)
B) (x + 5)2(3x2 + 79)
C) 7(x + 5)
D) 7(x + 5)2

**19.**

**Simplify the expression.**

A) 65
B) 
C) 77
D) 

**20.**

**Find the product.**(4x + 6)(4x - 6)

A) 16x2 - 36
B) 4x2 - 48x - 36
C) 16x2 + 48x - 36
D) 16x2 - 48x - 36

**21.**

**Name the property illustrated.**8(7 + 9) = (7 + 9)8

A) Commutative property
B) Associative and commutative properties
C) Distributive and associative properties
D) Identity and associative properties

**22.**

**Mark the statement as true or false.**The absolute value of any nonzero number is positive.

A) True
B) False

**23.**

**Rationalize the denominator. Assume all variables represent positive real numbers.**

A) 
B) 
C) 
D) 

**24.**

**Solve the equation.**= 

A) 4
B) -12
C) -4
D) 3

**25.**

**Perform the indicated operation. Give the answer in lowest terms.**÷ 

A) 
B) 
C) z + 3
D) 